

REMARKS

The preceding amendments and the following remarks form a full and complete response to the Office Action dated February 18, 2009. Applicants have amended claims 2-5, 7-12. Claims 1 and 6 were cancelled without prejudice or disclaimer, and new claims 13-18 were added. No new matter has been added. Support for the claim amendments can be found, *inter alia*, in original claims 1 and 6 and at ¶ 20 of the Specification.¹ Accordingly claims 2-5 and 7-18 are pending in this application. In view of the above amendments and the following remarks, Applicants respectfully request reconsideration of this Application and allowance of all of the presently pending claims.

Applicants' representatives thank Examiner Hageman and Supervisory Examiner Mackey for taking the time to participate in a personal interview on June 2, 2009.

Claim 12 was rejected under 35 U.S.C. §112, second paragraph, for allegedly being indefinite. In particular, it was contended that claim 12 was indefinite because it embraced both a process and an apparatus. See Office Action at 2. While Applicants disagree, claim 12 has been amended. Applicants submit that claim 12 fully complies with the requirements of 35 U.S.C. § 112. Accordingly, Applicants respectfully request the withdrawal of the rejection of claim 12.

Claim 12 was rejected under 35 U.S.C. §101 because the claim was directed to allegedly non-statutory subject matter. Specifically, it was contended in the Office Action that claim 12 was directed to neither a process nor a machine, but both statutory classes of invention. See Office Action at 2-3. While Applicants disagree, claim 12 has been amended. Applicants submit that claim 12 recites statutory subject

¹ Unless otherwise noted, references to the Specification refer to U.S. Patent Application Publication No. 2002/0011447, which was published on January 19, 2006.

matter. Accordingly, Applicants respectfully request the withdrawal of the rejection of claim 12.

Claims 1-4 and 6-12 were rejected under 35 U.S.C. §103(a) as unpatentable over EP 0779604 to Baudat ("Baudat") in view of U.S. Patent 6,913,260 to Maier ("Maier"). Applicants traverse the rejection on the basis that claims 2-4 and 7-12 (claims 1 and 6 have been cancelled without prejudice or disclaimer) recite subject matter neither disclosed nor suggested by the combination of Baudat and Maier.

Independent claim 3, upon which claims 2, 4-5, and 8-12 depend, recites a method for adjusting a bank note processing machine wherein threshold values of sensor are defined for recognizing bank notes unfit for circulation. The method includes the step of selecting at least one bank note fit for circulation based at least in part of the lack of soil, damage, or alien elements. At least one bank note unfit for circulation is also selected based on the presence of soil, damage, or alien elements. The bank notes are processed by the bank note processing machine and the data of at least one sensor is stored. At least one threshold value for the at least one sensor is defined by evaluating the stored data of the at least one sensor. The definition of the at least one threshold value is effected by selecting the threshold value from a multitude of pre-determined threshold values.

Independent claim 7, upon which claims 13-18 depend, recites a method for adjusting a bank note processing machine wherein threshold values of sensor are defined for recognizing bank notes unfit for circulation. The method includes the step of selecting at least one bank note fit for circulation based at least in part of the lack of soil, damage, or alien elements. At least one bank note unfit for circulation is also selected

based on the presence of soil, damage, or alien elements. The bank notes are processed by the bank note processing machine and the data of at least one sensor is stored. At least one threshold value for the at least one sensor is defined by evaluating the stored data of the at least one sensor. Bank notes fit for circulation and those unfit for circulation are processed jointly and the rate of bank notes fit for circulation and/or the rate of those unfit for circulation is specified. The rate is the number of bank notes of bank notes that a user defines as fit or unfit (expressed, for example, as a percentage) that are used to determine threshold values. See Specification at ¶ 25. For instance, if a user specified a rate of 10%, then the 10% of the notes with the greatest soiling or damage might be chosen to set the threshold values for unfit bank notes. *Id.*

Baudat relates to a system and method of classifying the denomination of an article of currency. See Baudat at Abstract. In particular, Baudat discloses a money validator for validating bank notes. *Id.* at col. 1, lines 3-5. In other words, Baudat is directed to separating genuine bank notes from false (counterfeit) bank notes. *Id.* at col. 1, lines 26-32. This separation is accomplished through use of a neural network based system, which can operate in a training mode. *Id.* at col. 1, lines 43-58. When operating in training mode, the system measures a set of bank notes in order to determine suitable values for certain weighting coefficients. *Id.* at col. 11, lines 36-40. The training set of bank notes can include subsets of each type of bank note (e.g., different denominations), in each orientation, and forgeries for each type of note/orientation. *Id.* at col. 12, lines 11-18. Baudat fails to disclose or suggest a system for identifying bank notes based on their fitness for circulation. Indeed, The Office Action recognizes that Baudat fails to disclose or suggest choosing fitness “based at

least in part on the presence of soil, damage, or alien elements,” as claim 1 requires, because it cites Maier for this feature.

Maier relates to a currency handling system comprising a fitness detector. See Maier at Abstract. Maier discloses that for some applications, the fitness of currency can be judged based on the soil level of a bank note is determined to have. *Id.* at col. 2, lines 4-9. The soil level is based on comparing patterns of the bill (via a bit map image) with predetermined levels to determine if the bill is fit or unfit. *Id.* This is to determine whether a bill should be taken out of circulation. *Id.* at col. 1, lines 33-35.

Instead of disclosing selecting fit and unfit bank notes as claims 3 and 7 require, Baudat discloses a system for determining the legitimacy of bank notes that is trained using genuine and false bank notes. There is a difference between selecting for fitness and selecting for the legitimacy of a bill. One of ordinary skill in the art would understand fitness to do with the wear and tear a bank note has received as a result of circulation. It is not a judgment of whether the bank note is real. Indeed, this interpretation of the term is supported by Maier, which judges fitness based *only* on soil level. See Maier at col. 2, lines 5-15. Soil level is a result of use. By contrast the determination whether a bill is genuine or false has nothing to do with determining the fitness of a bank note, but rather, whether it is a bank note at all. Put another way, a bank note could very well be fit and illegitimate at the same time.

With this in mind, it becomes entirely clear that the Baudat/Maier combination fails to disclose or suggest each and every feature of claims 3 and 7. For instance, Baudat/Maier fails to disclose selecting at least one bank note fit/unfit for circulation, as

claim 1 requires. Accordingly, for this reason alone, the rejection of claims 3 and 7 is improper and should be withdrawn.

Claim 3 is patentable over the combination of Baudat and Maier for the separate and independent reason that neither reference discloses a method of adjusting a bank note processing machine characterized in that the definition of at least one threshold value is effected by selecting the threshold value from a multitude of pre-determined threshold values, as claim 3 requires. The Office Action contends that this feature is disclosed by Baudet at col. 13, lines 10-16. See Office Action at 3 (stating that Baudat also discloses “the definition of the at least one threshold value is effected by selecting the threshold value from a multitude of given threshold values (c13 lines 10+)”). However, Baudat merely discloses choosing from coefficients that have been found during the training mode; Baudat does not disclose pre-determined thresholds because Baudat’s coefficients are not pre-determined at all. Instead, they are determined during the training mode. Additionally, Maier fails to remedy the deficiencies of Baudat because it also fails to disclose or suggest selecting a threshold value from a multitude of pre-determined threshold values. Accordingly, the combination of Baudat and Maier fails to render claim 3 obvious.

Applicants, therefore, respectfully request the withdrawal of the rejection of claim 3. Claims 2, 4, and 8-12 depend from claim 3 (either directly or indirectly) and are patentable for at least the same reasons that claim 3 is patentable as well as for the additional features they recite. Applicants, therefore, respectfully request the withdrawal of the rejection of claims 2, 4, and 8-12 as well.

Claim 7 is patentable over the combination of Baudat and Maier for the separate and independent reason that neither Baudat nor Maier discloses or suggests a method for adjusting a bank note processing machine characterized in that the bank notes fit for circulation and those unfit for circulation are processed jointly and at least one of the rate of bank notes fit for circulation or the rate of those unfit for circulation is specified. The Office Action alleges that the portion of Baudat that discloses training until a high rate of rejection for forgeries and a high acceptance for genuine bank notes is achieved. See Office Action at 4; Baudat at col. 12, lines 36-42. However, the cited portion of Baudat does not disclose specifying a rate, as required by claim 7.

Paragraph 25 of the Specification summarizes the meaning of this feature of claim 7 succinctly:

It is likewise possible to provide joint insertion of the quantity of all selected bank notes instead of the described separate insertion of bank notes classified as unfit for circulation and those classified as fit for circulation. In this case it can be provided that the operator uses the input/output device 45 to specify a rate for the bank notes classified as unfit for circulation, e.g. in percent. If for example 10% of the bank notes are classified as unfit for circulation by the operator, this value is entered by the operator. In the above-described way the data stored in the memory of the control device 40 for all selected bank notes are analyzed by the control device 40, how great e.g. the soiling and/or damage, etc., of the individual bank notes is. On the basis of this analysis the data of the 10% of the selected bank notes are used for determining or selecting the threshold value or values which have the greatest soiling and/or damage, etc.

Specification at ¶ 25 (emphasis added). Thus, in the present invention, the rate is specified in order to arrive at the threshold values. By contrast, Baudat discloses a mere check of the efficacy of the training mode and not the claimed rates. Maier also

makes no disclosure that remedies this deficiency of Baudat. Applicants, therefore, respectfully request the withdrawal of the rejection of claim 7.

Claim 5 was rejected under 35 U.S.C. § 103(a) as unpatentable over the Baudat/Maier combination in further view of U.S. Patent No. 7,044,463 to Brotherston. Applicants traverse the rejection on the basis that claim 5 recites subject matter neither disclosed nor suggested by the combination of Baudat, Maier, and Brotherston. For instance, claim 5 depends from claim 3 and is patentable over the combination of Baudat and Maier for at least the same reasons stated above with respect to claim 3. Brotherston, which the Office only cites for its disclosure of a use of a separator document to mark the beginning and end of a batch (see Office Action at 5), fails to remedy the deficiencies of Baudat and Maier stated above with respect to claim 3. Accordingly, Applicants respectfully request the withdrawal of the rejection of claim 5.

New claims 13-18 are patentable over the art of record for at least the same reasons stated above with respect to claim 7, from which they depend. Applicants, therefore, respectfully request allowance of claims 13-18

CONCLUSION

Applicants have sufficiently addressed all of the outstanding objections and rejections with the foregoing amendments and remarks. Accordingly, Applicants respectfully request that the Examiner allow of pending claims 2-5 and 7-18 and pass the application to issue.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account No. 02-2135.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

Respectfully submitted,

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